REMARKS

This amendment is in response to the Office Action of January 5, 2007 in which claims 14, 16, 19, 22, 25, 26 and 38-40 were rejected and the drawings were objected to.

A new set of claims 44-49 have been added to cover a display apparatus such as the embodiment of the present invention shown in Fig. 1C. Claim 44 closely resembles pending claim 14 except for removing the means-plus-function language and substituting elements shown in Fig. 1C. Therefore, the Examiner should be assisted in understanding how claim 14 can be read onto Fig. 1C in a similar way as explained below. The first element of new claim 44 has had the "means" language removed and corresponds for example to the display surface 2C shown in Fig. 1C which is responsive to a decoded mixed image signal for providing a mixed image light signal in an image space for presentation to a viewer's eye. The second element of new claim 44 has also had the means language of pending claim 14 removed and new language substituted therefor. The new language corresponds to a decoder such as the decoder shown in Fig. 1C responsive to an encoded mixed image electrical signal 3C for providing the decoded mixed image electrical signal that is provided to the display surface. Thus, the new claim 44 has as one of its elements a display surface that is for providing successive mixed optical images of an object space in an image space which is the same language used in pending claim 14 which has been objected to by the Examiner in connection with the objection to the drawings.

The other part of that element of claim 14 and objected to by the Examiner in connection with the drawings claims that the successive mixed images are for "simulating percepts of optical images of the object space cast on a simulated eye's retina. The simulated eye's retina is that of the cameraman's eye 62 shown in Fig. 2, for instance. This simulation is carried out in the object space 20 of Fig. 2 by the video camera 66 which captures light 32 reflected from an object 68 gazed upon by the cameraman 60 in the object space 20. Thus, the image source 50 of Fig. 2 corresponds to the display surface 2C of Fig. 1C and provides successive mixed images on a line 28 in Fig. 2 to the eye 42 of the viewer 30.

The second element of new claim 44 is a decoder (using language similar to that of the second element of claim 14), responsive to an encoded mixed image electrical signal such as shown on the line 3C in Fig. 1C for providing the decoded mixed image signal to which the display surface is responsive for providing successive mixed optical images. Referring again to Fig. 2, the image content of selected successive mixed images is changed according to changes in the direction of the cameraman's eye 62 in the object space. The part of the claim that refers to the highly detailed component being cast on the fovea of the retina of the viewer's eye refers to the viewer 30 of Fig. 2. The part of the claim that refers to the highly detailed and lesser detailed components are shown for instance in Figs. 8-12 with both highly and lesser detailed components. Also, Fig. 18A shows an example of a highly detailed component 604 within a lesser detailed component 600/602.

Thus, the new claims 44-49 closely resemble claims 14, 16, 19, 27, 48, and 49 except not using the means-plus-function language of claim 14 and covering the display embodiment of Fig. 1C.

New claims 50-55 also closely resemble pending claims 14, 16, 19, 53, 54 and 55 except not using means-plus-function language and covering the camera embodiment of Fig. 1B. In that embodiment, the first element claims a converter such as the converter 5B of Fig. 1B responsive to a mixed image light signal for providing a mixed image electrical signal in an object space such as the object space 20 of Fig. 2. The output electrical signal corresponds to the signal on the line 88 of Fig. 2. This mixed image electrical signal on the line 88 can be transmitted for example by the transmitter 90 via an antenna for use in the embodiment of Fig. 1C as claimed in claims 44-49.

The second element of new claim 50 also closely resembles the second element of claim 14 except not using means-plus-function language. In the second element of claim 50, a non-uniform resolution optical conversion device such as the non-uniform resolution optical conversion device 4B of Fig. 1B is responsive to a light image signal such as the signal 3B of Fig. 1B for providing the mixed image light signal to which the converter in the first element of claim 50 is responsive. Such a non-uniform resolution optical conversion device 4B might for example be a nonlinear lens such as a fish eye lens.

New claims 56-61 closely resemble claims 14, 16, 19, 38, 39 and 40 except that new claim 56 does not use the means-plus-function language of claim 14. That language has been changed to correspond to the embodiment of Fig. 1A which shows a uniform resolution optical conversion device, responsive to light in an object space, for providing a uniform light image signal. Such might be a lens.

The second element of new claim 56 claims a converter such as the non-uniform conversion of light to electrical signal device 5A of Fig. 1A which is responsive to the light image signal from the device 4A for providing a mixed image electrical signal on the line 1A.

Both the camera embodiments claimed in new claims 50 and 56 can be viewed as corresponding to the camera in the object space 20 of Fig. 2 except creating the mixed image electrical signal on the lines 1A and 1B of Figs. 1A and 1B differently. These were claimed this way because one could choose to use a fish eye type lens for example or a uniform resolution type lens which casts light on to a light sensor in a uniform way. A fish eye lens of course does it in a non-uniform way. It all depends on how the designer wishes to create the mixed image electrical signal on the line 1A, 1B.

Regarding the Examiner's objection to the drawings in connection with the claimed language "means for providing additional successive mixed optical images of the object space in the image space for presentation to the viewer's remaining eye" this corresponds to the stereoscopic embodiment of Fig. 16 which uses two cameras instead of one and either two displays in the image space 500 or two displays in the image space 470.

It will therefore be appreciated that the language used in claim 14, which uses "means-plus-function" language, is crafted in such a way as to cover either a display embodiment or a camera embodiment or even a computer generated embodiment as mentioned in the specification in the paragraph bridging pages 16 and 17 which starts out with the phrase "it should be pointed out that the video signal ...".

Therefore, the language in claim 14 which has been cited by the Examiner in the objection to the drawings, has been explained in connection with the various embodiments shown in Figs. 1A, 1B and 1C, all of which are covered by the means-

plus-function language of claim 14 which is to be understood broadly as covering any of these three embodiments plus other embodiments not specifically shown including equivalent structures and structural equivalents.

Withdrawal of the objection to the drawings is requested.

Regarding the indefiniteness rejection of claims 14, 16, 19, 22, 25-26 and 38-40, the Examiner points to claim 14, lines 2-3 as being unclear as pertains to what exactly is meant by "means for providing successive mixed optical images of an object space in an image space."

In connection with the above explanation of the three embodiments shown in Figs. 1A, 1B, 1C, now claimed in independent claims 56, 50 and 44, respectively, this language can mean in a display context, for instance, the display surface 2C of Fig. 1C or in one camera embodiment the converter 4B of Fig. 1B or in another camera embodiment of Fig. 1A the converter 5A of Fig. 1A. Regarding the object space and image space, the difference between the object space and the image space was explained in the specification at page 8, in the last five lines. There, it is stated that the words "object space" mean a real or imaginary space represented by successive images. The words "image space" means a space used to provide images. Such spaces are illustrated by the object space 20 of Fig. 2 and the image space 22 of Fig. 2. Similarly, Fig. 16 shows an object space for 400 and two different image spaces 470, 500. Thus, the image space such as the image space 22 of Fig. 2 means a space used to provide images such as the images 28 provided from the image source 50 to the viewer 30. The words "object space" refer to for instance the real space 20 of Fig. 2 represented by the claimed successive images which are gathered in the object space and presented in the image space.

Regarding lines 5-6 of claim 14, the "successive mixed images for simulating percepts of optical images of the object space cast on a simulated eye's retina", the "simulated eye's retina" corresponds for instance to the cameraman's eye 62 of Fig. 2 whose eye position is monitored by the eye position monitor 76. This monitor is used by a control 82 to control the video camera 66 in such a way that the cameraman's percepts of the object space 20 are simulated by the mixed images provided by the camera.

Regarding claim 14, lines 7-9, the means for changing the image content can correspond to the decoder device shown in the display 2C of Fig. 1C for instance or can cover the non-uniform resolution optical conversion device 4B of Fig. 1B in the camera embodiment of Fig. 1B or can correspond to the converter 4A of the camera embodiment of Fig. 1A, all of which change the image content of selected successive mixed images according to changes in the direction of the simulated eye's visual axis in the object space which has been explained above.

Regarding claim 14, line 13 and how exactly the "highly detailed component may be cast on the fovea" of the retina of the viewer's eye, the mechanism that "divides" the images and directs the image into different parts of the eye corresponds to a display surface in a display embodiment. In a camera embodiment such as that of Fig. 1A or Fig. 1B, the language refers to the use of the mixed image electrical signal 1A or 1B in Fig. 1A or 1B. The similar question about lines 14-15 and "the lesser detail component" cast on at least the "remainder of the retina" of the viewer's eye, both of these parts of the image are converted either in the optical element 4B or Fig. 1B or the electrical component 5A of Fig. 1A for creating highly detailed and lesser detailed components such as shown in Figs. 8-12. In the case of optical conversion, it is done with a non-linear lens such as a fish eye lens or in the case of electrical, it is done by a non-linear coating process in an electrical coder such as the device 5A of Fig. 1A.

Withdrawal of the indefiniteness rejection of claims 14-16, 19, 22, 25-26 and 38-40 is requested.

Regarding the obviousness rejection of claims 14, 16, 19, 22, 25-26 and 38-40, the Examiner has applied U.S. 5,175,616 (*Milgram et al*) in view of U.S. 4,513,317 (*Ruoff, Jr.*).

Milgram shows stereo cameras that can be widely separated to exaggerate the stereo effect but which tries to prevent dyplopia (loss of stereopsis) in one viewing the resulting stereo images by converging the camera.

Milgram shows the viewer controlling the convergence of the cameras with what appears to be a joystick. He uses the joystick to get the cameras to converge on the objects that he is directing his attention to. This is something quite different altogether from providing a mixed optical image having a highly detailed component

and a lesser detailed component with the successive mixed images for simulating percepts of optical images of the object space.

Furthermore, as pointed out above, it is not a passive process but rather an active one with the user in full control with use of the joystick.

The Examiner points to the superimposition of a virtual, graphic pointer video signal onto the video signal of the remote environment so as to allow the two signals to be displayed together as a single combined video signal on a single viewing screen. However, this is not a "mixed image" with a highly detailed component and a lesser detailed component as claimed and as explained in the specification at page 9, lines 18-25.

Thus, the fact that *Milgram* shows the viewer controlling the convergence of the cameras with a joy stick cannot be understood to be the same as the claimed provision of mixed images with a highly detailed component and a lesser detailed component.

The Examiner admits this fact on page 6 and refers to *Ruoff, Jr.* for disclosing same. The motivation for combining *Ruoff* with *Milgram*, according to the Examiner is to use a mixed image with different detailed or resolution components in a television apparatus of *Ruoff, Jr.* into the stereoscopic television system of *Milgram* to provide a television apparatus to provide a retinal stabilized variable resolution television display.

However, both *Ruoff* and *Milgram* show an active user in the image space and there is no passive following by the user in the image space of the simulated eye's visual axis as claimed.

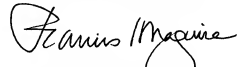
Therefore, there would be no motivation to make the combination as suggested by the Examiner.

Withdrawal of the obviousness rejection of claims 14, 16, 19, 22, 25, 26 and 38-40 is requested.

The objections and rejections of the Office Action of January 5, 2007, having been obviated by amendment or shown to be inapplicable, withdrawal thereof is requested and passage of claims 14, 16, 19, 22, 25-26, 38-40, and 44-61 to issue is earnestly solicited.

Our check for $100.00 for one extra independent claim is enclosed but if this is insufficient or if there is an extension of time fee due which may have been overlooked, the Commissioner is authorized to deduct the required fee or fees from our Deposit Account No. 23-0442.

Respectfully submitted,



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